The Auto Trouble Solver

If you have any problems or wish any information about your automobile, write us and we will be pleased to answer you under this heading in Sunday's paper.

ADDRESS AUTOMOBILE EDITOR

(Copyright, 1916, by Frederick C. Guerrlich.)

Q. Will you please say what causes a car to overheat, and what to do to prevent it? My Ford car gets very hot. It is two years old. H. H. O.

A. The causes of an engine overheating are as follows:

Level of water in radiator too low.

Water not circulating properly. This may be due to dirt in the piping, or to the fact that the hose has rotted and the rubber on the inside come loose from the fabric. A piece of hose may look perfect on the outside, yet be rotted on the inside.

Fan belt slipping.

Lime scale on the radiator and cylinder walls. Periodically the water should be drained out of the radiator and it then be filled with water in which has been dissolved some washing soda in the ratio of about a handful to a bucket. The engine should then be run for a little while, or better still, the car driven for a few miles, and the water then drained off. The radiator must then be filled with fresh water and the engine run for a few minutes. This water must then be drained out and the process of washing out with pure water repeated until it comes out clear.

Poor lubrication, due to low-grade oil, not enough oil, or stale oil. About every thousand miles the old oil should be drained off and thrown away, and the engine then filled with fresh oil.

Carbon in cylinders.

Running too long on retarded spark.

Running too long on low gear.

Q. A chauffeur in the garage where I keep my car says that if I filter my gasoline through a chamois skin that I may have an explosion. Is there any danger in doing it? I used a chamois skin for some years, but never hay any trouble. A. C. B.

A. There has been a number of serious accidents when gasoline was filtered through a chamois. The cause of this is that as the gasoline runs through the chamois static electricity is generated and when the funnel is taken out of the tank a spark results, causing an explosion. A fine wire gauze will give as good results in filtering the gas as will the chamois, and I would advise its use.

Q. All the electric horns I have seen work by a motor-driven rachet hitting a point on a diaphragm. Do you think a horn made something like a bell with the knocker hitting the diaphragm would work, and do you think I could make money out of the idea? T. C. M.

A. Horns operated by an electro magnet, as suggested by you, are on the market and in use.

Q. What is the best to use in the differential, a heavy oil or a grease?

A. This time of the year the writer likes to use a nonfluid oil which, when the can in which it is sold is tipped up, will flow out, and which will stick to the hand when the hand is put into it. In the winter time a heavy cylinder oil is probably best. If there is a tendency for the oil to work its way onto the brakes do not use the oil.

Q. Will you please tell me if a black tire is better than a white one? A. McB.

A. You cannot judge a tire by its color. It is the stock from which the tire is made that makes it good or bad. A poor stock can be colored either black or white.

Q. For about a week recently my car had no power, and there would be explosions in the carbureter. Then, suddenly, it got O. K. again and has been running fine since. I have been trying to think what could have been the trouble and if it will come back again. Can you suggest the cause of it acting so. J. P. J.

A. There are two things which suggest themselves to me as the cause of your trouble. One is that you may have had some water in your line, the other is that your gasoline feed line was stopped up due to dirt. It is likely that the vibration of the car caused the line to clear itself so that the car is now running well. I would suggest that you have your feed line cleaned out thoroughly, as if dirt was the trouble it may come back again in an aggravated form.

Q. I have read a lot about water being used as a substitute for gasoline by putting something in it. Do you thing this is going to be done? A friend of mine claims that it is like perpetual motion and will not be done, but I think it can. Are there any scientific reasons why it can't? H. B. C.

A. Not having been present at any of the tests made with these substitutes, the writer cannot express an opinion on them. The fact that they were not immediately adopted, however, make me skeptical.

Perpetual motion is against the well-known laws of nature and so never will be found, but I cannot see that this is the case with the idea of using water as a fuel.

STREET RAILWAYS USE MOTOR BUSES

English Lines Find Profitable; American Companies Adopt Them.

Several English street railway companies are finding the use of motor omnibuses profitable as feeders or auxiliaries to their rail service, and at the last annual convention of the American Electric Railway association held in San Francisco, it was decided to investigate the possibilities of supplementing the regular street car service with motor buses in this country. Thus, the final outcome of the fight that the street car companies everywhere have made against the jitney bus may be the adoption of regular buses by the companies themselves.

The motor bus section of the Sheffield Corporation Tramways in England earned a gross profit of $26,850 during the business year ended March 25, 1916. The company operated 21 buses in regular service on ten routes totaling 80 miles in length, five of which extend for a considerable distance beyond the city limits. More than 500,000 miles were traversed by the buses during the year.

The Birmingham Corporation Tramways earned a profit of more than $50,000 in the year ended March 31. Its 41 motor buses carried 6,300,000 passengers and covered 938,226 miles, earning a gross average revenue of nearly 25 cents per bus-mile, while operating expenses averaged less than 18 cents per bus-mile.

Other English systems operating motor buses are the York Corporation Tramway department (four), Oldham county borough (three) and Bournemouth Corporation Tramways.

All of these municipally-owned services are finding that the motor bus is giving them a new lease on life, for without spending large sums on permanent track and overhead equipment, fresh revenue is brought in. The buses, while not always showing profits themselves, increase the traffic on the rail lines.

A year ago the United Railways & Electric Co., of Baltimore, organized the Baltimore Transit company and began operating 25 12-passenger buses to determine their desirability as an adjunct to the regular trolley-car system.—The Automobile.

ILLINOIS FARMERS KEEN FOR TRACTORS

Their Problem Is Quest for Best Size and Type; Too Many Models.

The Illinois farmer who visited the five-day tractor demonstration held here this week is not concerned over whether he shall buy a tractor or not. He has already settled that question. He has made up his mind that he must have a tractor and he is going to buy one. The problem that is worrying him today is what tractor he will buy. His vexing problems are what size of machine and what type of machine. Size and type confuse him immeasurably.

The attendance was much larger than exhibitors had anticipated. The opinion was expressed very freely that although the numbers were not quite so great as at Fremont, the demonstration was quite as successful, from a business point of view. Perhaps the reduced attendance may partly be explained by the fact that Henry Ford and his new tractor were not present.

The attitude of the farmer toward tractors was well answered by the fact that at Wednesday's demonstration more than five thousand automobiles were on hand, a large percentage of these representing farmer machines.

Standards Needed.

One of the most serious handicaps to the more rapid development of the tractor business is the very apparent uncertainty of tractor manufacturers as to the most suitable type of tractor. Frequently a farmer asking for information finds that he cannot get any convincing advice regarding the size of machine best suited to his requirements. The position is not improved by the attitude of more than one of the old implement manufacturers, as several of these concerns are making a needlessly wide range of machines. When one firm has six machines all quite different, the tendency is to put it up to the farmer to decide what he wants rather than to advise him to have one or another. When it is obvious that the manufacturer has not made up his mind as to which is the best type the farmer's confidence is naturally not very swift in coming.

The variation in type is certainly holding back the sale of tractors because the technical arguments placed before the farmer by different manufacturers are so antagonistic. For example, the champions of the very low-speed and the moderately high-speed engines are very bitter regarding each other, and the farmer cannot possibly reconcile the statements made by the two camps. It is the same with different systems of transmission. The tractor is nowhere near the stage of development reached by the automobile and the least discerning can readily perceive this. Consequently the more the tractor men get together and the more closely they agree from the broader features of design the easier will it be for the farmer to make up his mind and the greater the number will be sold.—The Automobile.

Facts Not Worth Knowing.

The society for the securing of more privacy for canary birds has been incorporated in Wabalia, Mo.

A Kirkwood benedict has perfected a cuckoo clock that won't cuckoo on the nights when he goes to a lodge meeting.

A pair of roller skates that require no gasoline is the product of a Connecticut citizen's brain.

The department of agriculture prints pamphlets on the eradication of mosquitoes, but apparently the mosquitoes don't read 'em.

Among the millions of passengers traveling weekly through the New York tubes not one has ever commented on the delightful view.

The ostrich, which hides its head in the sand when frightened, would have a tough time in a marble corridor.—St. Louis Post.

Agile.

"Is Smithers an active church member?"

"I should say he is—so active that the finance committee can never find him when subscriptions for the pastor's salary are due."

"BEST O' SERVICE"

Studebaker

TERMS IF DESIRED

YOU DO NOT HAVE TO WAIT FOR YOUR NEW—

STUDEBAKER

It Is Ready for Immediate Delivery In All Models.

We have just received 3 car loads, consisting of Four and Six Cylinder 7-Passenger Touring Cars—Four and Six-Cylinder Roadsters and the New Station Wagons.

4-Cyl. Models

7 - passenger Touring Car $875.

3 - passenger Roadster $850.

6-Cyl. Models

7 - passenger Touring Car $1,085.

3 - passenger Roadster $1,060.

Welsh-McNulty Motor Co.

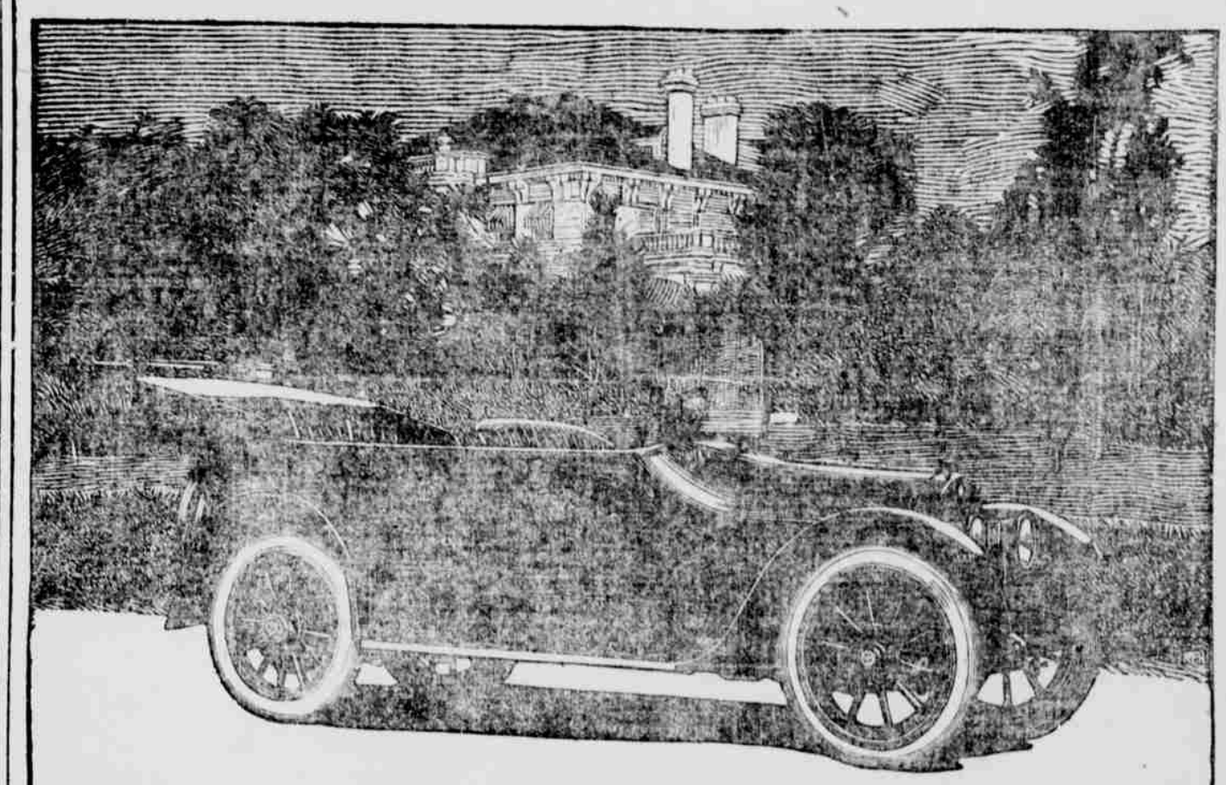
A Demonstration will not obligate you in any way.

Salesroom, Seventh and Boulder — COLEMAN McNULTY

PHONE 4816

Service Station, 114 S. Denver — COLLINS W. WELSH

SAPULPA BRANCH, 203 EAST HOBSON



The New Eight-Cylinder Cadillac

Type 55

THERE is one thought in connection with the coming of this new Cadillac which we would like you to grasp at once.

With the advent of this car, the Cadillac "Eight" enters upon its third successive season, with no radical change in the basic principles of its design.

This is perhaps the first time such a thing has happened in motor car development, and you will quickly see its significance as applied to the Cadillac.

Quite properly, we believe, the world has always looked to the Cadillac Company for advanced ideas, improved practice and progressive principles.

The fact, therefore, that the Cadillac car has proven itself beyond the need of radical change, is, in itself, too illuminating to call for comment.

It does not, by any manner of means, imply that the Cadillac process of refinement had come to a conclusion.

In a multitude of ways, this is a better, finer Cadillac than any which has preceded it—the subject of unremitting research and scientific betterment in scores of details.

What the absence of radical change really means, is that the underlying principles of Cadillac V-type eight-cylinder construction have been proven fundamentally sound by the performance of 31,000 cars.

It means that the Cadillac Company, with resources at its command probably superior to those possessed by any other motor car plant in the world, has arrived at the deliberate judgment that the **kind** of a motor car which it is now building, represents a higher degree of efficiency than any other in existence.

It means that this is the joint judgment of every expert mind associated with this Company. It expresses the judgment of 31,000 owners who cannot conceive of any respect in which Cadillac principles could be changed to their advantage.

The new Cadillac conforms to the finest Cadillac traditions, down to the least and last of details—and it advances them still more closely toward perfection.

It is a beautiful car to look upon.

The superior riding qualities, with which you are familiar, are enhanced and intensified.

The driving ease of last year and the year before, accentuated by the longer wheelbase of the new car, is more marked than ever.

It is doubtful if motoring can give rise to a situation which can successfully challenge Cadillac powers.

The old feeling that it is folly to seek further—the old sense of security that the Cadillac represents the uttermost in a motor car—will come over you more strongly than ever.

We are serenely confident of the exhilaration and enthusiasm which you will experience on the occasion of your first ride in this unusual car.

Specifications in Brief.

ENGINE—Eight cylinder V-type, High-speed, High efficiency. HORSEPOWER—S. A. E. rating 31.25; actual, more than 60. COOLING—Water. RADIATOR—Cadillac tubular and plate type. IGNITION, STARTING, LIGHTING—Cadillac-Delco, improved system. LUBRICATION—Automatic pressure feed. CARBURETOR—Cadillac. CLUTCH—Multiple disc, dry plate type. TRANSMISSION—Selective type sliding gear, three speeds forward and reverse. AXLES—Rear, Cadillac Timken, full floating; Timken bearings; Spiral type bevel driving gears. Front axle, drop forged, I beam. DRIVE—Tubular shaft. BRAKES—One internal and one external brake direct on wheels, 17 inch x 2 1-2 inch drums. STEERING GEAR—Cadillac patented worm and worm gear sector type; 18-inch steering wheel, hinged to facilitate entrance. FRAME—Channel section. WHEELS—Wood, artillery type, Timken bearings, fitted with demountable rims for straight side tires. TIRES—36" x 4 1-2". WHEELBASE—125 and 132 inches. TREAD—56 inches. (Option 61 inches). SPRINGS—Front, semi-elliptic; rear, three-quarter platform. CONTROL—Center control. GASOLINE SYSTEM—Twenty gallon tank with gauge at rear. STANDARD EQUIPMENT—Cadillac "one-man" top; windshield; full lamp equipment; Gabriel Snubbers; Clock; Warner Autometer; Electric horn; Power tire pump; Foot rail; Robe rail; License tag holders; Tire carrier; tool box with locks; Set of tools; Tire repair kit; Handy lamp. Universal key fitting tool box, ignition and lighting switch and tire lock.

Body Styles and Prices.

The Type-55 Cadillac will be available with a complete variety of body styles, as follows:

Open cars, 125-inch wheelbase; Seven-Passenger with disappearing auxiliary seats $2,080. Four-Passenger Phaeton $2,080. Two-Passenger Roadster with two-passenger disappearing rumble seat $2,080. Four-Passenger Close Coupled Roadster $2,080.

Convertible styles, 125-inch wheelbase; Seven-Passenger with Cadillac body (Springfield type) $2,675. Four-Passenger Victoria (convertible) $2,550.

Enclosed cars, 125-inch wheelbase; Four-Passenger Coupe $2,800. Five-Passenger Brougham $2,950.

Enclosed cars, 132-inch wheelbase; Seven-Passenger Limousine $3,600. Seven-Passenger Landaulet $3,750. Seven-Passenger Imperial $3,750. Prices include standard equipment, F. O. B. Detroit. Prices are subject to advance without notice.

New Cadillac Co. of Okla.

Sixth and Main Sts. Phone 3008